



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: 1500 P. O. BOX 1450  
P. O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,109	02/13/2006	Adam Achim	710100-021	5475
7590	01/05/2007		EXAMINER	
Robert L Stearns Dickinson Wright 38525 Woodward Avenue Bloomfield Hills, MI 48304-2970			ZIMMERMAN, JOHN J	
			ART UNIT	PAPER NUMBER
			1775	
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	01/05/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.	Applicant(s)
10/568,109	ACHIM ET AL.
Examiner	Art Unit
John J. Zimmerman	1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.  
2a) This action is FINAL.                    2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
5) Claim(s) \_\_\_\_ is/are allowed.  
6) Claim(s) 1-14 is/are rejected.  
7) Claim(s) \_\_\_\_ is/are objected to.  
8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on 13 February 2006 is/are: a) accepted or b) objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
    1. Certified copies of the priority documents have been received.  
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO/SB/08)  
    Paper No(s)/Mail Date 20060213.
- 4) Interview Summary (PTO-413)  
    Paper No(s)/Mail Date. \_\_\_\_\_.  
5) Notice of Informal Patent Application  
6) Other: \_\_\_\_\_

## FIRST OFFICE ACTION

### *Preliminary Amendments*

1. The "PRELIMINARY AMENDMENT" received February 13, 2006 has been entered.  
Claims 1-8 are pending in this application.

### *Priority*

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d). Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

### *Information Disclosure Statement*

3. The "INFORMATION DISCLOSURE STATEMENT BY APPLICANT" received February 13, 2006 has been considered. An initialed form PTO-1449 is enclosed with this First Office Action.

### *Claim Rejections - 35 USC § 112, First Paragraph*

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 12-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not describe how to perform the "subdividing" and "shaping" steps of independent claim 12, line 5. It is not clear what constitutes the "subdividing" and "shaping" steps or in what manner these steps are to be performed, and to what specific end result. A review of the specification gives no guidance on these steps and therefore these steps are not enabled by the specification.

***Claim Rejections - 35 USC § 112, Second Paragraph***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 9-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. It is not clear what the "and/or" refers to in claim 9, line 6. Dependent claims 10 and 11 depend on indefinite claim 9.

9. It is not clear what constitutes the "subdividing" and "shaping" steps in claim 12, line 5, or in what manner these steps are to be performed, and to what specific end result. Dependent claims 13 and 14 depend on indefinite claim 12.

***Double Patenting***

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of copending U.S. Patent Application No. 10/568,110 in view of Kawachi (U.S. 2003/048961). Although the conflicting claims are not identical, they are not patentably distinct from each other because they claim the same composite multilayer material, having a backing layer, a bearing layer of copper alloy or aluminum alloy, a nickel intermediate layer having a thickness of greater than 4  $\mu\text{m}$  and an

overlay layer containing 0-20 wt.% copper and/or silver. The claims differ mainly in that the overlay layer further contains bismuth in the pending application and further contains tin in the copending application. Kawachi, however, clearly shows that Sn, Pb and/or Bi alloys are considered obvious alternative alloy bases for overlay layers in the bearing art (e.g. see paragraphs [0001]-[0003]). In view of Kawachi, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any one of Sn, Pb and/or Bi base alloys for a overlay layer since these are all shown to be considered obvious alternative alloy bases for overlay layers in the bearing art. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawachi (U.S. 2003/0048961).

14. Kawachi '961 discloses a bearing having a steel backing layer, a copper alloy or aluminum alloy bearing layer, an intermediate layer and an overlay (e.g. see Figure 2; paragraph [0024]). The intermediate layer can be nickel (e.g. see paragraph [0017]) and the overlay can be

a bismuth alloy containing 0.1-10 wt.% copper (e.g. see paragraphs [0011]-[0012]) and 0.1-20 wt.% Ag (e.g. see paragraph [0016]). The thickness of the intermediate layer can be between 0.5 to 8  $\mu\text{m}$  (e.g. see paragraph 17). While the copper and/or silver ranges in the overlay of Kawachi '961 may not be coextensive with the claimed ranges, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a *prima facie* case of obviousness, see *In re Malagari*, 182 USPQ 549. Likewise, while the thickness ranges of the overlay of Kawachi '961 may not be coextensive with the claimed overlay thickness ranges, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the overlay layer thickness to produce a bearing having conformability, good anti-seizure property and fatigue resistance (e.g. see paragraph [0037]).

15. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawachi (U.S. 2004/0241489) in view of Kawachi (U.S. 2003/0048961).

16. Kawachi '489 discloses a bearing having a steel backing layer, a copper alloy or aluminum alloy bearing layer, an intermediate layer and an overlay (e.g. see Figure 2; paragraph [0017]). The intermediate layer can be nickel (e.g. paragraph [0013]; Table 1) and the overlay can be a bismuth alloy containing 0.1-10 wt.% copper and 0.5-10 wt.% tin (e.g. see paragraph [0008]). The overlay can have a thickness of 3-15  $\mu\text{m}$  (e.g. see paragraph [0020]) and the bearing is exposed to elevated temperatures that would inherently cause some interdiffusion

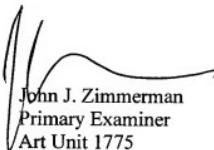
between the layers (e.g. Table 2; paragraph [0034]). Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on *prima facie* obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977). When there is a substantially similar product, as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct not the examiner to show that the same process of making, see *In re Brown*, 173 U.S.P.Q 685, and *In re Fessmann*, 180 U.S.P.Q. 324. While the copper and/or silver ranges in the overlay of Kawachi '489 may not be coextensive with the claimed ranges, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a *prima facie* case of obviousness, see *In re Malagari*, 182 USPQ 549. Likewise, while the thickness ranges of the overlay of Kawachi '489 may not be coextensive with the claimed overlay thickness ranges, the ranges overlap and it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to practice the thickness ranges of Kawachi '489 over his entire disclosed range. Kawachi '489 may differ from the pending claims in that while Kawachi '489 does disclose the use of a nickel intermediate layer between the bearing layer and the overlay, Kawachi '489 may not disclose the thickness of this

layer. On this issue, however, Kawachi '961 clearly shows that the optimum thickness range for the nickel intermediate layer is between 0.5-8  $\mu\text{m}$  (e.g. see paragraph [0017]). In view of Kawachi '961, it would have been obvious to one of ordinary skill in the art at the time the invention was made to manufacture the nickel intermediate layer of Kawachi '489 over a thickness range of 0.5-8  $\mu\text{m}$  because Kawachi '961 discloses that intermediate nickel layers in this thickness range enhances bonding of the multilayer bearing.

***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional prior art of record serves to further establish the level of ordinary skill in the art at the time the invention was made.
  
18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Zimmerman whose telephone number is (571) 272-1547. The examiner can normally be reached on 8:30am-5:00pm, M-F. Supervisor Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John J. Zimmerman  
Primary Examiner  
Art Unit 1775